

ABSTRACT OF THE DISCLOSURE

Additional charge of a solid raw material 13 in the shapes of granules/lumps, low in raw material cost, and with no risk of cracking, is performed into a molten raw material 14 in a crucible in a static manner without solidifying a surface of the molten raw material 14 in the crucible 3. A bottom of a cylindrical raw material vessel 10 made of a material non-melttable when being in contact with the molten raw material 14 in the crucible 3 is closed with a bottom cover 11 made of a material melttable and removable when being in contact with the molten raw material 14 in the crucible 3. The raw material vessel 10 in a state of being filled with the solid raw material 13 in the shapes of granules/lumps is hung down above the crucible 3 to immerse the lower portion thereof into the molten raw material 14 in the crucible 3. The bottom cover 11 is molten and removed by putting the bottom cover 11 into contact with the molten raw material 14 in the crucible 3 to thereby charge the solid raw material 13 in the raw material vessel 10 into the molten raw material 14 in the crucible 3.